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ABSTRACT

Three philosophic positions underlying the process of education -- to know, to do, and to be -- are considered as complementary rather than conflicting goals in this discussion of what the process of learning and teaching should ideally involve. "The Parable of a Literate Farmer" is the vehicle for describing the learning and teaching process. The farmer is frustrated in his attempts to persuade his children to continue his life's work, the study and accumulation of a pile of manure. Trying to instill in his children his knowledge of the pile he ignores the processes of "doing" and "being." In a second ending to the parable the farmer reflects on his own learning process and sees that his is not the master of a body of knowledge so much as a creator of his own understanding. This time the farmer is able to teach his children by valuing and stimulating their unique styles of understanding. He, in turn, becomes for his children the model of a competent man, as they see him take in and benefit from his experiences with them. The parable now represents an effective process for self-actuating involvement in the act of learning. (JH)

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Introduction

In an article that appeared in the 1971 Yearbook of the National Council for Geographic Education,[1] William Pattison presented three philosophic positions underlying the process of education. The thrust of these three philosophies revolves around the goals (1) to know, (2) to do, and (3) to be. The development of educational philosophy and practice over many years has included debate over the relative merits of each of these goals as a continuing and, at times, acrimonious theme. Pattison effectively reflected these quarrels in detailing each of these goals in terms of geographic education, and further related them to the nature of geography and its four traditions as functional components of the social studies movement.

In this paper I would like to extend beyond the thrust of Pattison's article by considering the substance of the three philosophies, not as conflicting but as complementary goals in the process of learning. To do this we need not retrace the history of education reformulating the arguments for and against each polarized position. We need only assume that each goal has its own legitimacy in the educational process, and attempt to find an integrating model. We start with a parable to illustrate the problem.

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[1] William Pattison, "The Educational Purposes of Geography," Evaluation in Geographic Education; The 1971 Yearbook of the National Council for Geographic Education, Dana Kurfman, ed., (Fearon Publishers, 1970, pp. 17-26),

The Parable of a Literate Farmer[2]

There once was a farmer, a literate man, who in his reading, discovered a treatise on the value of manure for the productivity of his farm. The article made exquisite sense for it explained in detail the effect of the chemical nutrients found in manure on the structure and growth of crops. It also pointed out the economy of keeping the beasts who produce the manure for they yield a plethora of other useful products--horses for their motive energy, cows for their meat, milk, and cheese, chickens for their eggs and drumsticks, pigs for their hams, sheep for their wool and roasts. Indeed, the suppliers of this diverse fare yield also the means of producing a waxing supply of the feed necessary for their own mission.

The farmer was so excited by his understanding of this signal verity of his universe that he committed himself to the amassing of manure. In his dreams the manure pile was infinite--he visualized himself accumulating more and more manure until his last day at which time his children would carry on his life's work to make the pile higher and higher and more and more magnificiently inclusive. For how could anything so magnificiently simple be more elegant than this rotation of feed to manure to feed that was obviously the result of a provident nature's infinite wisdom.

The farmer spent great effort in structuring his pile of manure. He carefully classified it according to type and quality. He analyze it for its chemical content, its density, its structure. He tested

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[2]Challenge and Change in College Geography, Nicholas Helburn, ed., Commission on Geographic Education, Boulder, Colorado, 1972.

it for its qualities of decomposition, its mixing properties and its effect on the structure of soil. He observed a multitude of bacteria and insects that took as their milieu the object of his passion, and he marveled at the harmony of their existence. He arranged his manure in a pile in such a way that each type and quality was positioned in a highly rational fashion. Any particular quality could be instantly withdrawn and combined with any other quality to produce a compound more splendid than any predecessor. He became so skilled in his techniques, so competent in his knowledge of manure that his fame spread far and wide. He was most satisfied with his accomplishment, and he felt great joy as he walked around his pile and contemplated its magnificence and his understanding of it.

Now, as we said before, the farmer dreamed that the outcome of his labors would be carried beyond his allotted days. He felt therefore, compelled to pass on his understanding of manure, so assiduously gained, to his progeny. In his later years, he began to develop ways to transmit his understandings, his techniques, his skills of analysis; to teach his children about manure, and to instill in them a love of the product and a commitment to its study. He described in detail the substance of his pile. He produced diagrams of its structure, and exercises dealing with the identification of its elements and compounds. He even took them to the pile itself so that they could observe first hand the substance of his knowledge in its real world setting. He explained in detail the interrelationships that he had discovered between the elements within his pile. He ordered his presentations from the simplest of elements to the most complex

of compounds, each being prerequisite for the next consideration. He built models of the mechanisms that account for the relationships so essential to their knowing of the subject matter, and he used them to explain not once, but several times, the subtleties of his structure. He defined his classifications, making explicit their power, purpose and logic, and they were given problems to solve to reinforce their understanding. He told them more than once the story of the development of his pile, reasoning that the lore of their antecedents would offer his children insights into the stewardship of their inheritance. Always he tested them to insure his effect on them. His materials and strategies were models of logic and reasoned planning. By all of his standards of rigor and scholarship, he was a superb teacher.

He was sometimes disturbed, however, because some of his children seemed to respond to his tests properly, but could not seem to carry on their learning to the frontiers of new knowledge, while others who seemed to be rather imaginative did substantial violence to the structure. The one group of his children could absorb the symbols of his labor, but could not understand his style nor his motivation. The other group could not revere his artifact, and, at the same time, practice the art of piling manure in their own creative ways. Sometimes he despaired of his dreams.

Well he might despair. One child continued to point out to him that the crops to feed his animals were not prospering. Indeed, the fields were declining rapidly in productivity since the manure was not being used for its purpose. The farmer, however, did not hear his child, for his pile was so large and so consuming of his

effort that he was blinded to the fields beyond. His project atrophied as was its destiny, and the world continued much as always it had.

Commentary

Consider, for a moment, our literate farmer. He was admired by his community, for he was what his community admired. He produced an artifact, a structure of knowledge, that could be monitored and appreciated. His commitment to his enterprise, his skill and creativity in learning, his push to the frontiers of knowledge could be described, studied and valued. He used his own resources, his own energy and mind, to fashion an individual success. His success was not lost in his own awareness, and he found joy in his enterprise. He was a virtuous man; a man to be revered and emulated.

Still, he was destined to despair for the same reasons that all such men fall victims to their considerable virtue. It is a matter of excellence run rampant. It is hybris; that quality of excess within an enterprise that does violence to itself and to its relationships with other worlds of endeavor. It is a field of grain so luxuriant that the crop chokes itself, and its yield is diminished. It is the aggressive righteousness of one culture that motivates it to take up the "white man's burden" to civilize another culture, and in the process to do violence to that other culture's very being. It is a pride that falls only a tiny millimeter short of arrogance, and blinds one to the intrinsic value of others. It denigrates others and destroys trust in their integrity and creativity. It alienates one from another and divorces each from the world of which he is

necessarily and obviously a part. The purpose of the enterprise is forfeited and the power to perpetuate it is lost.

There is our farmer. He had proven himself, both to himself and his community. He basked in the joy of his own understanding and the appreciative regard he received from others. Is it not true that he was a man of virtue? The answer is obvious. Then why should others not be as he? What perverse streak bedeviled his children such that they could not be in his image? Some demonstrated that they could master his knowledge. They seemed to know the intricacies of his pile almost as well as he himself. Why, then, were they unable to expand his pile as he would have done had he more time on earth? Other children seemed to exhibit the creativity lacking in the first group and so apparent in their father, but they had no respect for his life's work. They insisted upon tearing down his pile and building their own, often with disastrous results. Why couldn't they accept his knowledge for what it had been judged, tested and true? Why did they seem compelled to waste their days? And what of the child who talked of the fields? Why must she deal in irrelevancies? The farmer was not a spreader of his pile. That had nothing to do with the structure of his knowledge; spreading should be done by others. First things must come first. Before others can be effective spreaders, they must know something important about what it is that they are spreading. Could anything be more valuable than to discover that knowledge?

One farmer could find no satisfactory answer to his questions from within his own awareness, and he was brought to despair. That is, the stuff of tragedy: Hybris unchecked by a tempering humility

that comes from sensing one's place in a large and complex world. It is as though the farmer looked through the eyepiece of a telescope trained on his own venture, and drew his own "Texan's map of the world. He saw his enterprise through the distorting lens of his pride and became more and more alienated from the "others," his children, who could have helped insure his dreams. He could not see them as enterprisers of value in and of themselves. Some were non-creative, others wasted time tinkering with his knowledge, and still another dealt in irrelevancies. Frustration! "Why can't they just be like me?"

He forgot about his own processes. He began his career with a treatise and an insight, and built a structure of knowledge and value. He did it without a teacher. It was a product of his own invention. His motives were born of a positive aspect of that same hybris; the quality of obstinate pursuit that leads to accomplishment. He was an inquirer and a discoverer, and his inquiry came from within himself. He discovered by his own devices. He experienced the frustration of not knowing, and reveled in the joy of understanding. Why couldn't he let them be like himself?

The Goal "To Know"

The answer to this question may well lie in the philosophic positions to which Pattison addressed himself in his article. Clearly the farmer committed himself to the goal "to know," when he faced the necessity of passing on his knowledge to his children. His materials were elegant in their logic and scholarship--a product of his considerable intellectual power. His strategies were traditional--tried and true. There was no questionable unorthodoxy in his approach to teaching. He held to the central issue of transmitting to his chil-

dren the substance of his pile with the single-mindedness of a man convinced of the value of his knowledge. Still he despaired of his efforts, for his children seemed to miss the essence of his knowledge.

His despair resulted, perhaps, from two difficulties inherent in that traditional strategy. In the first instance, the strategy tends to stifle creativity in the process of learning; in the second instance, it tends to divert the learner from the task of understanding and internalizing the subject content. In the first case, inventiveness, imagination and intellectual independence are not only ignored, but are often discouraged. In the second case, there is a serious question whether many learners learn the subject matter in any useful way at all.

The first case suggests that structured subject matter may inhibit the creative process of learning by providing a set of filters through which the process of thought must be developed. They are a part of one's experience and become increasingly familiar and comfortable. Structured knowledge functions as an area of security, a retreat from the frustrations of the new and the radical. Under these circumstances it is difficult to break the mold--to think divergently, to develop alternative perspectives, to infuse into one's own system of knowing, alien ideas derived from the adventure of discovery. Dealing primarily with established details, memorizing facts and concepts, the learner may become competent within the specific doctrine that he sees as his subject matter content.

But the learner is frequently not so successful in asking and answering new questions--questions formulated in different contexts or

questions arising from the fields outside the area of the pile. Each concept in his personal system of knowing is unique and particular. Seldom is he able to transfer insights obtained in one context to an analogous context. In a word, he is snared in the same trap as the farmer's first group of children- those who could pass their father's tests, but who could not add anything significant to the pile.

The second case may be more effectively elaborated in metaphorical terms describing the "God" model for the presentation of knowledge. It represents the learning model implicit in many traditional classrooms, and describes in some important respects the farmer's teaching procedures. As such it may be useful in illustrating the mechanism by which learners may be diverted from the intended content.

The first important thing to understand about the God model is that God tells his children the truth. Everyone knows that God's content is the truth. His words shimmer and sparkle in the beauty of their syntax. Indeed, the glory of his words are so awesome, their meaning so obscure, so defiant of simple understanding, that only the most intellectually gifted can be expected to really understand. Surely such elegance representing such complexity is the product of an omniscient intellect.

Of course, God wants his children to know the truth. Truth is power to expand the substance of life, and God is concerned for his children. Indeed, God is insistent that his children understand his words, that they take them into their structure of knowing, that his words be internalized in terms of their authentic behavior. Since God knows, in his infinite wisdom, that learners must be motivated, he promises that if his children understand, they will take up resi-

dence in heaven, and if they do not, they will be consigned to hell.

Now, heaven is surely a place to which all aspire. It is success, the fulfillment of physical and spiritual needs, a just reward for the respectful achievement of understanding. It is a place of physical comfort and psychic contentment.[3] There is, however, no joy in hell. Hell is the penalty for failure. Perhaps it is a dark room in which a swimming pool filled with molten rocks has been installed. Bubbles erupt from the pool and break in mid-air with a flinty "flunk." The bursting bubbles serve to remind the intellectual washout of his abject failure. They follow him forever as an animated report card attesting to his mental incapacity. Hell is failure, a foreclosure on the chances for the development of self-respect and self-fulfillment. Is it any wonder that those who do not understand God's words should seek an alternative way to achieve the reward of heaven?

Such an alternative does exist. God's child simply finds ways to make God think he understands. He studies God carefully for hints as to what God thinks are critically important principles. He pores over the scriptures underlining certain important passages, usually with a yellow, felt-tipped pen, which he then commits to memory lest God ask him to recite. He devises a number of rituals designed to placate God's wrath should he err in his recitation. He learns to genuflect, to defer, to be docile in God's presence. He learns these skills effectively and he very likely gets to heaven, but he does not

[3]Could it be that the houses found in heaven's best neighborhoods are A-frames?

understand the content of God's words. He does not internalize them. He cannot bring them to bear on the substance of his own life. His efforts are diverted toward form and away from substance. He has learned, but he has not learned the intended lessons. To the extent that the farmer's first group of children responded correctly to his examinations, one is left wondering how many had simply learned to respond properly to tests and how many understood the content of his pile.

The Goals "To Do" And "To Be"

In his total commitment to the goal 'to know," the farmer ignored two processes so important to him in coming to know his pile. He ignored the necessity of learning "to do" and he minimized the development of a sense of joy, power, and freedom which motivated him to make further investments in the pursuit of his knowledge. He became frustrated with his second group of children who were involved in "doing" as they attempted to pile their own piles. He could see only the value of his knowledge and could not instruct them in alternative ways of accumulating their pile. He saw their activity as a rejection of his knowledge and thus lost the opportunity to help them analyze their failures and develop new hypotheses.

He could do no better with his third child. He could not see her involvement in the world outside the metaphor of his own structured content. He was so deep in the category of study as defined by his pile that he was unable to define a new problem in the context of the child's structure of knowing so that he could bring her to the relevance of his own knowledge. He forgot that he had identified the

categories of his pile--that these categories had not existed before his considerable efforts. In forgetting, he lost another opportunity to develop a child motivated to learn. The feeling of joy that resulted from insights derived from his own free learning experience, the sense of competence, the self-actuating pursuit of knowledge--all were denied his children. He could not see the value of his own learning process as a model for his children's learning and he failed.

Now, what of the goals of "to do" and "to be." To focus on these two goals, we might rewrite our parable of the farmer giving it a new ending. Suppose we start with the fourth paragraph--the one that begins "Now, as we said before, the farmer dreamed that the outcomes of his labor . . . " and alter the farmer's strategy for raising up his children in his own traditions. Perhaps the new ending might go like this.

The Second Ending

The farmer dreamed the outcome of his labors would be carried beyond his allotted days and felt compelled to prepare his children for their stewardship of his enterprise. Being an introspective man he set about his new task by reflecting at length on his own learning processes. He knew intimately the structure of his pile and he reflected on the usefulness of that structure to order his knowledge, to allow him to think systematically about his subject matter, to derive questions that needed treatment so that his pile might be further expanded. In the course of these musings, it occurred to him that his pile had been built bit by bit and that the nature of each succeeding bit was conditioned by what he had learned before. "Suppose," he

asked himself, "I had developed my pile in a different order, deriving my insights from different questions drawn from different contexts, and based on different assumptions? Would my pile be as it is now? Is not my pile--its substance and its structure--only a statement--a metaphor--of my unique understanding of this small aspect of the world? Might other piles be as useful, as satisfying, as elegant as my own?" It would be inordinately arrogant, the farmer decided, to answer the last question negatively. It occurred to him that to fit other piles, built from different antecedents, against his own might yield yet another generation of understandings more powerful and magnificent than any he had yet imagined. Thus he came to see himself not only as master of a body of knowledge, but as creator of his own understanding and he felt a sense of freedom and power in his own creativity.

The farmer began to talk with his children, to come to know them, to come to understand their unique views of the world, their interests and their styles. He shared his own views with them, revealing the frustrations and excitements of his own involvement with his pile and the world of which it was a part. His children began to see the intellectually skilled and involved human being that was frequently hidden behind the facade of his formidable reputation. He encouraged them to question events in their own experience and he helped them to formulate their questions as problems for study. When questions were not forthcoming, he raised questions of his own taking care to state them in language and context that they could identify within their own structure of knowing. He reflected with them on their problems and he helped them design

critical experiments to test their ideas for solutions. Together they evaluated the results of their experiments and reflected on the errors of their analyses. They plumbed the pile that represented the farmer's past learning to find guidance for their analyses and to find ways of integrating their contributions into the developing thread of what was known. In the process, they began to evaluate the pile in different contexts and to understand it in different metaphors. They came to see the power of these processes in the development of insights and together they reveled in the delight that accompanied each success. The children came to see their father as an exciting model of a competent, self-actuating and creative learner--a caring man--a man to be emulated. Thus they came to be what their father was.

The farmer took great joy in the community of his children and in his last days he was content. The community possessed substance, openness and skill. Could one want more from one's life?

Commentary

In the second ending we see a farmer not as a man of hybris, but rather as a man who understood his own processes. He understood his own unique being and, as a result, he could value the uniqueness of the others who were so essential to the fulfillment of his dreams. It was an understanding that tempered the imposition of his own rightness on his children with the realization that if such an imposition were to destroy their sense of competence, creativity and value as human beings, the spirit and purpose of his truth was lost. We speak here of sophrosyne--that sense of humility that lets one reach out to another and to accept the other's unique style, motivation,

knowledge and abilities. It allows one to bring his own substance up against another's to search for commonalities and to reflect on apparent disparities. The farmer saw the value of the gentling effect of sophrosyne not only because he abhorred the violation of his children's human rights, but because it enhanced his own understanding. It allowed him to project his own being into the content of his children's concerns, and, in the process, to achieve insights free of the constraints imposed by dogmas born of his own established structure of knowing. It is this freedom that allowed him to see the world through the wide-angle lens of his children's experience, and, to see alternative metaphors for the reality represented by his pile. He rejoiced in his expanded sense of creativity, awareness and power. The farmer came to see the value of a humility that makes one a part of an enterprise rather than its manipulator and he was content.

Put another way, the farmer cared for his children. He saw them not as containers to be filled with his knowledge, but as human beings with a powerful potential for creative achievement and personal competence. In return, his children began to see in him a humanity that went far beyond his own expertise. He extended his resources to help them with their problems, and he helped them to help him with his own. He regarded them with respect and that respect was reciprocated. Together they developed a caring community--a community that not only provided powerful resources for their mutual learning, but developed interrelationships of mutual trust and concern that provided a saving antidote to individual loneliness and despair. It was in this sense of community that the farmer also found contentment in good measure.

But more than the farmer's own intellectual profit and personal gratification was achieved by the processes he used to train his children for the future cultivation of his enterprise. Because he was a man of knowledge, secure in his sense of competence and skilled in processes of analysis, reflection and evaluation, he was an effective model for his children to emulate. He was a credible person. He could and did do what he wanted his children to do, and he revealed himself in the process. When he muddled with the question of generating ideas relevant to a problem, his children saw that a competent man can err and turn his errors to advantage.[4] When he experienced the delight of insight, he shared his joy and his children saw that a competent man sees knowledge as more than sober rationality. The farmer questioned, critiqued, and offered alternative ideas as his children worked out their problems and he helped them to serve him in the same manner. Thus, his children saw that a competent man takes opposition to his ideas as a resource to be used in helping him think, not as a denigration of his being. The father showed his concern and respect for his children and they experienced the power, the warmth, the security of the caring relationship that he nurtured. His children saw that a competent man cares for the quality of the total human experience, now merely a single category represented by his own expertise.

Thus it was that the children came to know their father's pile, to understand it in a variety of contexts and to illuminate and expand it. They came to know by doing--by developing, the skills of reflection, analysis and evaluation. They learned to discover the meaning of facts, concepts, categories and structures and those

[4] I cannot resist the temptation to point out that toting up of errors is a major criterion for consignment to hell in the God model presented above.

meanings became part of them. In the process they came to have a sense of competence and self-worth that let them risk attacking the unknown for whatever insights might be derived. And they came to be in their sense of power and freedom that attends the awareness of one's own processes.

An Integrated Learning Model

If the farmer were to describe the structure of the process he used to teach his children, he might sketch the model shown in Figure 1. Most likely he would start with a problem--a problem, perhaps, that emanates from an insight, as in his own case where a treatise served to trigger a delighted awareness of a line of inquiry to which he felt compelled to commit himself. Or the problem might derive from the learner's curiosity about an observed disparity between an event encountered in the real world and what he believes he knows about such events. Or the problem might simply be a gift from the teacher which is designed to provide entry into the substance of the body of knowledge he means to teach. But whatever the genesis of the problem, the farmer would likely argue, it is a most convenient way to enter the learning process.

Given the problem, the learner begins a process of reflection, searching for relevancies, pursuing resources that may shed light on the issue, and creating a strategy for an attack on the question. As the strategy develops, possible solutions are formulated for testing and tests are created. Results of those tests are evaluated for their sensibleness, their internal consistency and for their congruence with observations drawn from other realms of experience. Attempts are made to integrate these considerations into the structure of the orthodox

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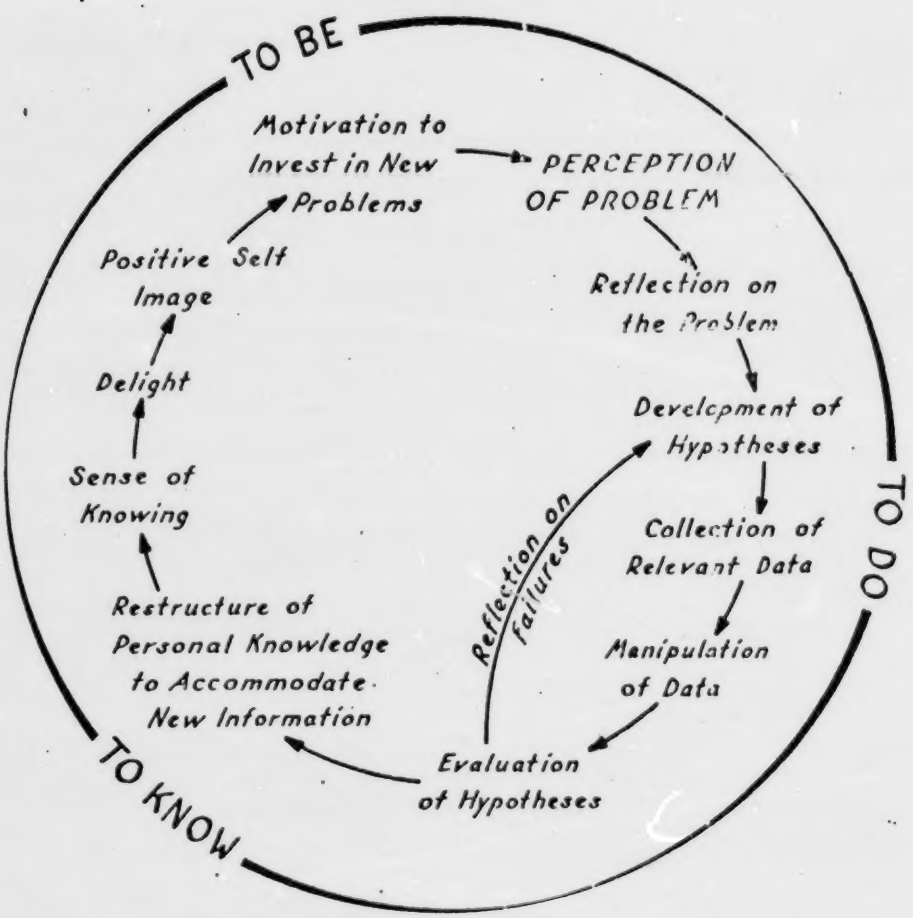

Figure 1
An Integrated Learning Model

subject matter, and, in the process, come to know that subject matter in terms of experience --to integrate that collective knowledge into the learner's personal structure of knowing. It is in this active participation--in the doing--that the learner comes to know, and he comes to know in a profound way.

We have been speaking here, of course, of "scientific method," an effective process for self-actuating involvement in the act of learning. But, the farmer would maintain, there is more to the process. From a sense of knowing comes a satisfaction of attainment--a delight of understanding--that is not lost in the awareness of a learner. It is from the joy in insight that a positive self-image is born and grows. It generates a sense of power, a self-confidence, that allows curiosity. It is difficult to inquire into areas unknown while clamped in a vise of fear that inquisitiveness will result in failure. It is far easier to rely on established dogmas, walking always in familiar paths, aggressively avoiding questions that may contradict things now known and may lead to new insights. It is the celebration of knowing--an acceptance of this delight of understanding as a legitimate human learning experience--that provides a powerful motivation for learners to learn. The farmer would argue that the sense of personal power, of self-assurance, of positive being, as an absolutely necessary part of the learning process.

The Teacher

So far we have spoken only of the learning process. But what of the teacher in the enterprise? What is the teacher's role in this scheme of things? Clearly, the farmer would argue, prescriptions for teacher practice are not in order. His own experience suggested that

to prescribe and dictate behavior is to stunt creativity, self-actuation and intellectual independence--those characteristics that are of first order importance in the act of learning. Teaching is not a matter of manipulative technique. It is a matter of individual style and integrity which cannot be taught. These things can only be learned.

In view of the foregoing, the farmer would likely advise only that a teacher be authentic in his approach to the enterprise. He must really care about the process of teaching and learning. He must genuinely care for his companions in the learning adventure. He must really become involved with his students on a human level. With the prerequisite of authenticity the teacher may feel free to define questions concerning the art of teaching, design experiments for the classroom, analyze failures, search for insights, delight in successes.

. . . .